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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,286	07/03/2003	Birger Hjertman	10806-198	3960
24256	7590	02/23/2006	EXAMINER	
DINSMORE & SHOHL, LLP 1900 CHEMED CENTER 255 EAST FIFTH STREET CINCINNATI, OH 45202			PRASAD, SONAL	
			ART UNIT	PAPER NUMBER
			3767	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/613,286	HJERTMAN, BIRGER	
	Examiner	Art Unit	
	Sonal Prasad	3767	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 23-25 is/are allowed.
- 6) ☒ Claim(s) 1-18, 20, 22 is/are rejected.
- 7) ☒ Claim(s) 19 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/8/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims **1-6,8,9,11-15,16,18, 20 & 22** are rejected under 35 U.S.C. 102(b) as being anticipated by Dalto et al (US 5,074,843). Dalto et al discloses a jet injector for injecting a liquid medical drug through the skin of a person to be treated comprising a housing to be pressurized and holding said medical drug and which is defined by an enclosing periphery wall and a bottom wall having an internal surface facing the interior of the housing and an opposite external surface, the bottom wall has at least one through passage extending between said internal and external surfaces and through which, when the injector is used, said medical drug is expelled from the housing and transformed into a thin jet stream penetrating the skin of said person, characterized in that said through passage includes a flow confining restriction to develop a high pressure in the medical drug expelled from the housing in that a body is connected to said passage said body is tapering in a direction away from the passage and terminates in a point and in that said body has a periphery surface receiving the expelled medical drug and guiding it towards said point to create a coherent jet stream emerging from said point. **(Detailed description 14, Fig. 1, claim 1)**

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Regarding claim 2, Dalto et al discloses a jet injector wherein said bottom wall has a through, truncated cone-shaped aperture defined by a wall wherein an insert having an essentially cone-shaped body is arranged to be inserted into said housing such that a portion of said cone-shaped body the periphery wall of which is essentially congruent to said aperture wall is received in said aperture and wherein at least one passage is established between said portion of said cone-shaped body and the aperture wall through which the medical drug is expelled from the housing said drug then flows along said essentially cone-shaped body to be delivered from said point of the cone-shaped body as a coherent, thin jet stream. **(Fig. 2, #28)**

Regarding claim 3, Dalto et al discloses a jet injector wherein at least a part of a point portion of said essentially cone-shaped body has a concave periphery surface. **(Fig. 2)**

Regarding claim 4, Dalto et al discloses a jet injector wherein said periphery surface of said essentially cone-shaped body from its point to said passage is concave. **(Fig. 2, #28)**

Regarding claim 5, Dalto et al discloses a jet injector wherein said essentially cone-shaped body is terminated in a sharp point. **(Fig. 2, #30)**

Regarding claim 6, Dalto et al discloses a jet injector wherein a positioning element protrudes from said bottom wall and terminates at a level beyond or at said point of the essentially cone-shaped body said positioning element is intended to be placed on the skin of the person to be treated when injecting the medical drug. **(Fig. 3, dd 4)**

Regarding claim 8, Dalto et al discloses a jet injector according to any of the preceding claims, wherein said insert is said essentially cone-shaped body, the base of which is

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positioned at the level of said internal surface of the bottom wall, when the injector is assembled. **(Fig. 2, #30)**

Regarding claim **9**, Dalto et al discloses a jet injector wherein said insert comprises a head body arranged to be inserted in said housing close to said bottom wall and connected to said essentially cone-shaped body. **(Fig. 2, #30)**

Regarding claim **11**, Dalto et al discloses a jet injector according to any of the preceding claims, wherein said bottom wall is perforated by a single aperture centrally positioned on a symmetry axis of said housing, said point of the essentially cone-shaped body being positioned on said symmetry axis when assembled. **(Fig. 2, #30)**

Regarding claim **12**, Dalto et al discloses a jet injector wherein a number of spacing means are provided between said insert and said bottom wall and/or between said insert and said aperture wall whereby a ring-shaped gap is formed between the periphery surface of said essentially cone-shaped body and the aperture wall. **(Fig. 3)**

Regarding claim **13**, Dalto et al discloses a jet injector wherein said spacing means are positioned between said internal surface of the bottom wall and an opposite surface of said head body. **(Fig. 2)**

Regarding claim **14**, Dalto et al discloses a jet injector wherein said spacing means are protrusions projecting from said internal surface of the bottom wall and/or from said surface of the head body. **(Fig. 3)**

Regarding claim **15**, Dalto et al discloses a jet injector wherein said spacing means are positioned between said periphery surface of the essentially cone-shaped body and said aperture wall. **(Fig. 2)**

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Regarding claim **16**, Dalto et al discloses a jet injector wherein spacing means injector wherein said are protrusions projecting from said periphery surface and/or said aperture wall. **(Fig. 2)**

Regarding claim **18**, Dalto et al discloses a jet injector wherein said passage is a number of grooves formed in said aperture wall and/or in said periphery surface of the essentially cone-shaped body. **(Fig. 2)**

Regarding claim **20**, Dalto et al discloses a jet injector wherein said insert is a hollow body confined by a pliable, elastic thin-walled shell, said shell being adapted to deflect when subjected to pressurized medical drug such that a gap is temporarily formed between the cone-shaped body and said aperture wall admitting a medical drug flow therebetween. **(Fig. 2 & 3)**

Regarding claim **22**, Dalto et al discloses a jet injector wherein said essentially cone-shaped body is solid and said body and said aperture is manufactured with coarse tolerances, said passage being formed by gaps occurring between said periphery surface of the body and said aperture wall. **(Fig. 2, #30)**

Claims **7,10,& 17** are rejected under 35 U.S.C. 102(b) as being anticipated by Navalier et al (US 6,623,446 B1). Navalier et al discloses

Regarding claim **7**, Navalier et al discloses a jet injector wherein said periphery wall, bottom wall, and positioning element of the jet injector are made in one piece of resin, preferably polycarbonate plastic. **(dd 6)**

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Regarding claim **10**, Navalier et al discloses a jet injector wherein said head body and the essentially cone-shaped body are made in one piece of resin, preferably polycarbonate plastic. **(dd 6)**

Regarding claim **17**, Navalier et al discloses a jet injector wherein said spacing means are bosses, pins, studs, ribs, ridges or the like integrated in the surface/wall from which they project. **(dd 15)**

Allowable Subject Matter

3. Claims **19 & 21** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

1. Claims **23-25** are allowed. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or render obvious at the time the invention was made the combination as claimed specifically including machining the periphery surface of the device such that the grooves extend from an internal surface of said bottom wall to the external surface of said bottom wall to its external surface when said insert is positioned into said aperture. Additionally, the prior art of record does not disclose or render obvious at the time the invention was made the positioning of the cone-shaped body into the aperture by inserting the insert into the housing , point first, so that the periphery surface of the cone –shaped body contacts said wall of the aperture creating a passage designed as a number of tube-like flow paths between said aperture and said body.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonal Prasad whose telephone number is 571-272-3383. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sonal Prasad
Examiner
Art Unit 3767



**MICHAEL J. HAYES
PRIMARY EXAMINER**